

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

5 **Listing of Claims:**

Claim 1 (currently amended): A fingerprint sensor for sensing a fingerprint, the fingerprint sensor comprising:

a detecting and processing circuit; and

a plurality of sensing units, each of the sensing units comprising:

10 a switch element comprising a first terminal, a second terminal, and a third terminal, the first terminal is connected to a switch terminal, the third terminal is connected to the detecting and processing circuit, and the switch element is turned on/off by the switch terminal;

15 a first resistor having a first terminal connected to the second terminal of the switch element, a fingerprint influenced intensity of light illuminating the first resistor so that resistance of the first resistor and a voltage level of the second terminal of the switch element change; and

20 a second resistor having a first terminal connected to the second terminal of the switch element and the resistance of the second resistor is fixed;

 wherein when the switch elements are turned on, the detecting and processing circuit analyzes the fingerprint according to the
25 voltage levels of the second terminals of the plurality switch elements.

Claim 2 (currently amended): The fingerprint sensor of claim 1 wherein each of the sensing units has a second terminal of the first resistor
30 connected to a first predetermined reference voltage and has a

second terminal of the second resistor connected to a second predetermined reference voltage, the voltage level of the first reference voltage differing from the voltage level of the second reference voltage.

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Claim 3 (original): The fingerprint sensor of claim 1 wherein each of the switch elements is a transistor.

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Claim 4 (original): The fingerprint sensor of claim 1 wherein the first resistor is manufactured from amorphous silicon.

Claim 5 (currently amended): The fingerprint sensor of claim 1 wherein the second resistor is manufactured from indium tin oxide.

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